Accuracy of System Management Action Flagging

May 2021 – April 2022

Published June 2022

Introduction

This report reviews the accuracy of the P217A flagging mechanism for the period 1st May 2021 – 30th April 2022, in accordance with the System Management Action Flagging (SMAF) methodology.

The purpose of P217A flagging is to remove actions that are taken by National Grid Electricity System Operator (NGESO) for system management issues from the cash out calculations of imbalance prices.

Examples of system management issues mainly faced by NGESO are:

- Transmission Constraint
- Voltage Support
- Rate of Change of Frequency (RoCoF)

Out of merit actions using options in the Balancing Mechanism (BM) are often used to help NGESO resolve system management issues. These actions do not constitute balancing actions taken by NGESO to manage the imbalance of demand and supply in real time, hence system actions are tagged and removed from cash out calculations.

The P217A flagging mechanism came into operation on 5th November 2009. From 5th November 2015 the scope of system management issues that were subjected to P217A flagging was broadened to include:

- Balancing actions used by National Grid primarily to manage the Rate of Change of Frequency (RoCoF), or to manage Fault Levels
- Automatic Low Frequency Demand Disconnection relay demand control action

To assess the accuracy of flagging, a statistical overview of Data Inquiry Reports (DIRs) produced during May 2021 to April 2022 is provided. A DIR is raised by the Control Room, or by post event analysis, or by market participants, when they are aware that the flagging of BOAs (Bid Offer Acceptances) for system (or energy) issues may have been incorrectly set. The DIRs are then investigated by the Post Event Performance Review Team.

If analysis concludes that flag changes are required, the Balancing and Settlement Code Company (BSCCo) are notified via BSCP18 process and the requisite changes are processed ahead of a settlement run.

From June 2014, any flags associated with actions in the Balancing Mechanism can be retrospectively updated in settlements systems. This is carried out for actions on which DIRs have been raised or where an error has been identified.

Highlights

During the reporting period, a total of 557,535 BOAs were accepted, where 136,480 BOAs were given P217A flags, representing 24.48% of the total accepted BOAs.

A table containing a monthly breakdown of total accepted BOAs, total BOAs P217A flagged and the percentage of BOAs flagged is shown below in Table 1.

Month & Year	Total Number of BOAs Accepted	Total Number of BOAs P217A Flagged	% BOAs Flagged to P217A
May-2021	42881	6735	15.71%
Jun-2021	43873	6513	14.85%
Jul-2021	41241	2125	5.15%
Aug-2021	42107	2403	5.71%
Sep-2021	39868	4241	10.64%
Oct-2021	51857	15647	30.17%
Nov-2021	60884	28035	46.05%
Dec-2021	46151	12485	27.05%
Jan-2022	53210	18341	34.47%
Feb-2022	56888	24733	43.48%
Mar-2022	41775	8495	20.34%
Apr-2022	36800	6727	18.28%
Total:	557535	136480	24.48%

Table 1: Monthly breakdown of total accepted BOAs

There were 50 DIRs raised in the reporting period, which led to a total of 164 BOAs being subjected to the BSCP18 process.

The majority of system flag amendments were for BOAs that should've been system flagged, but went through as energy. There were 17 DIRs raised for BOAs that should've been energy flagged, but went through as system, which involved a total of 38 BOAs.

Overall, 0.12% of the P217A BOAs flagged in the reporting period were the subject of a DIR process, giving a potential P217A flagging accuracy of 99.88%. Table 2 shows the historic P217A flagging accuracy for the previous five reporting years.

Reporting Year	Flagging Accuracy	
2016/2017	99.92%	
2017/2018	99.30%	
2018/2019	99.60%	
2019/2020	99.80%	
2020/2021	99.50%	

Table 2: Flagging accuracy for previous reporting years

This report is under continuous review and development, if you have any comments or suggestions of information you would like to see in the future reports, please send an Email to:

bm.liasionandcompliance@nationalgrideso.com